

PROJECT 10073 RECORD CARD

1. DATE 7 February 1963	2. LOCATION 15.34N 100.48W (Pacific)		12. CONCLUSIONS <input type="checkbox"/> Was Balloon <input type="checkbox"/> Probably Balloon <input type="checkbox"/> Possibly Balloon <input type="checkbox"/> Was Aircraft <input type="checkbox"/> Probably Aircraft <input type="checkbox"/> Possibly Aircraft <input type="checkbox"/> Was Astronomical <input type="checkbox"/> Probably Astronomical <input type="checkbox"/> Possibly Astronomical <input checked="" type="checkbox"/> Other <u>satellite</u>
3. DATE-TIME GROUP Local _____ GMT <u>07/1230Z</u>	4. TYPE OF OBSERVATION <input checked="" type="checkbox"/> Ground-Visual <input type="checkbox"/> Ground-Radar <input type="checkbox"/> Air-Visual <input type="checkbox"/> Air-Intercept Radar		
5. PHOTOS <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. SOURCE military		
7. LENGTH OF OBSERVATION 5 minutes	8. NUMBER OF OBJECTS one	9. COURSE northeast	<input type="checkbox"/> Insufficient Data for Evaluation <input type="checkbox"/> Unknown
10. BRIEF SUMMARY OF SIGHTING Satellite sighted at 40 dgr elevation below star Antares. Moving in northward direction of about 035 dgr T. Appeared to be in polar orbit.		11. COMMENTS ECHO data not available. Sighting is characteristic of Satellite and was reported as a satellite sighting not a UFO. ECHO (CLOSE) EQUATOR AT 9570 MIN IN AT 1228Z HEADING NE. DEFINITE ECHO I SIGHTING.	

07/12302
OPTIONAL FORM NO. 10
5010-103

UNITED STATES GOVERNMENT

Memorandum

TO : J. S. Lacey, OPI
NASA, Greenbelt

07/12302?
February
DATE: 19 February 1963

FROM : U.S. Naval Oceanographic Office
Code 5511:GEB

SUBJECT: Satellite sighting

Encl: (1) Reproduction of letter from USS MARYSVILLE dtd 13 Feb.

1. Enclosure (1) is forwarded for your information.

G. Buckwalter
GEORGE BUCKWALTER

U. S. S. MARYSVILLE (EPCEP-857)

C. O. FLEET POST OFFICE
SAN FRANCISCO, CALIFORNIA

EPCEP857/EZ:qn

23/3161

13 February 1963

From: Commanding Officer, USS MARYSVILLE (EPCEP 857)
To: Commander, U.S. Naval Oceanographic Office, Suitland, Maryland
Subj: Satellite sighting; report

1. The USS MARYSVILLE (EPCEP 857) in position 15-34.5N, 100-48.3W, on course 020°T, speed 6.4 knots, at approximately 1230 GMT., sighted a Satellite bearing 147°T at an altitude of 42° which when first sighted appeared slightly lower than the star Antares and moved in a northward direction, and disappeared on a bearing of 035°T. The entire observation taking about five (5) minutes. The satellite appeared to be in a polar orbit. Sighting made 7 February 1963.

2. The sky was broken with Cumulus and Cirrus clouds. Air temperature 81°F and Barometric pressure 29.91 inches, seas calm.

R. L. MC CAMERON

Copies to:

Naval Observatory, Wash, D.C.
U.S. Navy Branch Office
Oceanographic, Wilmington, Cal.

JANUARY 30, 1963

SATELLITE 1960 IOTA 1, ECHO I

These predictions are based on orbital elements revised on January 28, 1963
 T₀ = January 29 0, times are in days, U.T.
 Argument of perigee = 87.28 + 47.142 (t-T₀)
 Right ascension of ascending node = 235.063 - 1.7227 (t-T₀)

Inclination = 47.72669
 Eccentricity = 0.035219 - 2.141 × 10⁻⁴ (t-T₀)
 Semi-major axis = 7.858130 megameters
 Mean anomaly (Rev.) = 0.24414 + 12.461969 (t-T₀) - 1.37 × 10⁻⁶ (t-T₀)²

SATELLITE 1960 IOTA 1 FOR OTHER LATITUDES										SATELLITE 1960 IOTA 1 FOR OTHER LATITUDES									
EQUATOR S-N		SOUTH-NORTH		NORTH-SOUTH		EQUATOR S-N		SOUTH-NORTH		NORTH-SOUTH		EQUATOR S-N		SOUTH-NORTH		NORTH-SOUTH		EQUATOR S-N	
TIME (UT)	LONG. (W)	LAT.	TIME CORR.	LONG. CORR.	HT. (MI)	BEAR. (N-E)	TIME CORR.	LONG. CORR.	HT. (MI)	BEAR. (N-E)	TIME CORR.	TIME (UT)	LONG. (W)	LAT.	TIME CORR.	LONG. CORR.	HT. (MI)	BEAR. (N-E)	TIME CORR.
FEBRUARY 2, 1963																			
1 37.4	273.92	47.5	27.2	-83.09	851	90.0*	27.2	-83.14	851	90.0*		1 49.9	294.04	47.5	27.2	-83.10	815	90.0*	27.2
3 32.3	303.13	45.0	22.2	-60.97	812	72.2*	32.3	-105.23	853	107.8*		3 45.4	323.29	45.0	22.2	-60.97	786	72.2*	32.2
5 28.1	332.33	40.0	18.2	-45.74	786	60.7*	36.5	-120.41	831	119.4*		5 40.8	352.49	40.0	18.3	-45.73	770	60.7*	36.3
7 23.7	361.53	35.0	15.3	-36.10	772	54.0*	39.6	-129.99	858	126.1*		7 36.3	381.70	35.0	15.4	-36.09	762	54.0*	39.4
9 19.2	390.74	30.0	12.8	-28.75	762	49.4*	42.4	-137.29	881	130.7*		9 31.7	410.90	30.0	12.9	-28.73	759	49.4*	42.1
11 14.6	419.94	20.0	8.3	-17.41	753	43.7*	47.4	-148.51	919	136.4*		11 27.2	440.10	20.0	8.4	-17.39	762	43.7*	47.0
13 10.1	449.14	0.	0.	0.	767	40.0*	50.7	-165.66	970	140.2*		13 22.6	469.30	0.	0.	0.	795	39.4*	50.1
15 5.5	478.35	-20.0	-8.4	17.16	816	43.7*	-49.6	-168.00	1040	136.4*		15 18.1	498.51	-20.0	-8.5	17.35	858	43.7*	-50.0
17 1.0	507.55	-35.0	-13.1	28.68	854	49.4*	-54.2	-156.82	1136	130.7*		17 13.5	527.71	-35.0	-13.3	28.63	901	49.4*	-54.9
19 56.6	536.75	-45.0	-15.7	36.01	876	54.0*	-57.4	-129.99	1257	126.1*		19 9.1	556.91	-45.0	-16.0	35.94	926	54.0*	-57.0
21 51.9	565.96	-40.0	-18.7	45.01	907	60.7*	-50.4	-120.41	1399	119.4*		21 4.4	586.12	-40.0	-19.1	45.53	955	60.6*	-58.7
23 47.3	595.16	-35.0	-22.5	50.79	946	72.2*	-39.7	-104.84	1564	107.8*		23 59.9	615.32	-35.0	-23.3	60.68	991	72.2*	-39.3
		-47.5	-28.7	82.83	993	90.0*	-28.3	-82.90	1752	90.0*				-47.5	-28.7	82.70	1042	90.0*	-28.6
FEBRUARY 3, 1963																			
0 42.5	264.36	47.5	27.2	-83.09	841	90.0*	27.2	-83.14	841	90.0*		0 55.3	284.52	47.5	27.2	-83.10	808	90.0*	27.2
2 38.2	293.57	45.0	22.2	-60.97	804	72.2*	32.3	-105.24	884	107.8*		2 50.8	313.73	45.0	22.2	-60.96	781	72.2*	32.2
4 33.7	322.77	40.0	18.2	-45.74	781	60.7*	36.5	-120.43	920	119.4*		4 46.2	342.93	40.0	18.3	-45.72	767	60.7*	36.3
6 29.1	351.97	35.0	15.3	-36.10	768	54.0*	39.6	-129.91	967	126.1*		6 41.7	372.13	35.0	15.4	-36.08	762	54.0*	39.3
8 24.6	381.18	30.0	12.8	-28.75	760	49.4*	42.4	-137.31	1019	130.7*		8 37.1	401.33	30.0	12.9	-28.73	760	49.4*	42.0
10 20.0	410.38	20.0	8.3	-17.41	754	43.7*	47.4	-148.54	1086	136.4*		10 32.6	430.54	20.0	8.4	-17.39	766	43.7*	46.9
12 15.5	439.58	0.	0.	0.	772	40.0*	50.5	-165.70	1168	140.2*		12 28.0	459.74	0.	0.	0.	803	39.4*	50.0
14 11.0	468.79	-20.0	-8.4	17.17	825	43.7*	-49.6	-167.95	1268	136.4*		14 23.5	488.94	-20.0	-8.6	17.34	869	43.7*	-50.2
16 6.4	497.99	-35.0	-13.1	28.67	865	49.4*	-54.4	-156.78	1385	130.7*		16 18.9	518.15	-35.0	-13.3	28.61	913	49.4*	-55.0
18 1.9	527.19	-45.0	-15.8	35.99	890	54.0*	-57.5	-129.52	1528	126.1*		18 14.4	547.35	-45.0	-16.0	35.92	937	54.0*	-57.1
19 57.3	556.40	-40.0	-19.8	45.59	918	60.6*	-50.2	-120.00	1695	119.4*		19 9.8	576.55	-40.0	-19.2	45.51	966	60.6*	-58.8
21 52.8	585.60	-35.0	-24.0	50.76	957	72.2*	-39.8	-104.00	1882	107.8*		21 5.3	605.75	-35.0	-23.4	60.66	1001	72.2*	-39.4
23 48.3	614.80	-30.0	-28.5	82.80	1003	90.0*	-28.4	-82.85	2093	90.0*		23 5.3	634.95	-30.0	-28.9	82.67	1040	90.0*	-28.9
FEBRUARY 4, 1963																			
0 43.7	264.01	47.5	27.2	-83.10	831	90.0*	27.2	-83.14	831	90.0*		0 56.7	284.16	47.5	27.2	-83.09	801	90.0*	27.2
2 39.1	293.21	45.0	22.2	-60.97	797	72.2*	32.3	-105.25	912	107.8*		2 51.2	313.36	45.0	22.2	-60.96	777	72.2*	32.2
4 34.6	322.41	40.0	18.2	-45.74	776	60.7*	36.5	-120.45	947	119.4*		4 46.7	342.56	40.0	18.3	-45.71	766	60.7*	36.3
6 30.0	351.61	35.0	15.3	-36.10	765	54.0*	39.6	-129.93	994	126.1*		6 42.2	371.76	35.0	15.4	-36.07	762	54.0*	39.3
8 25.5	380.82	30.0	12.8	-28.75	759	49.4*	42.4	-137.33	1046	130.7*		8 37.6	400.96	30.0	12.9	-28.72	762	49.4*	42.0
10 20.9	410.02	20.0	8.3	-17.40	756	43.7*	47.4	-148.56	1104	136.4*		10 33.1	430.16	20.0	8.4	-17.38	771	43.7*	46.9
12 16.4	439.22	0.	0.	0.	774	40.0*	50.5	-165.72	1170	140.2*		12 28.5	459.36	0.	0.	0.	805	39.4*	50.0
14 11.9	468.43	-20.0	-8.4	17.17	836	43.7*	-49.7	-167.97	1256	136.4*		14 24.0	488.56	-20.0	-8.6	17.33	880	43.7*	-50.2
16 7.3	497.63	-35.0	-13.2	28.68	877	49.4*	-54.5	-156.79	1366	130.7*		16 19.4	517.76	-35.0	-13.3	28.60	924	49.4*	-55.0
18 2.7	526.84	-45.0	-15.9	35.98	902	54.0*	-57.7	-129.54	1501	126.1*		18 14.8	546.96	-45.0	-16.1	35.91	949	54.0*	-57.2
20 58.2	556.04	-40.0	-19.9	45.57	931	60.6*	-50.4	-120.02	1660	119.4*		20 10.2	576.16	-40.0	-19.2	45.48	976	60.6*	-58.9
22 53.6	585.24	-35.0	-24.1	50.74	969	72.2*	-39.9	-104.02	1840	107.8*		22 5.6	605.36	-35.0	-23.5	60.63	1011	72.2*	-39.5
		-47.5	-28.5	82.77	1014	90.0*	-28.5	-82.81	2044	90.0*		23 6.1	634.56	-35.0	-29.0	82.64	1047	90.0*	-29.0
FEBRUARY 5, 1963																			
0 44.1	264.45	47.5	27.2	-83.10	821	90.0*	27.2	-83.14	821	90.0*		1 1.5	294.60	47.5	27.2	-83.09	795	90.0*	27.2
2 40.5	293.65	45.0	22.2	-60.97	791	72.2*	32.3	-105.25	902	107.8*		2 52.0	324.00	45.0	22.3	-60.95	774	72.2*	32.2
4 36.0	322.85	40.0	18.3	-45.73	773	60.7*	36.5	-120.45	936	119.4*		4 47.4	353.20	40.0	18.4	-45.70	765	60.7*	36.3
6 31.4	352.05	35.0	15.4	-36.09	761	54.0*	39.6	-129.89	970	126.1*		6 42.8	382.40	35.0	15.5	-36.06	764	54.0*	39.3
8 26.9	381.25	30.0	12.9	-28.74	759	49.4*	42.5	-137.35	1022	130.7*		8 38.2	411.60	30.0	13.0	-28.71	765	49.4*	42.0
10 22.3	410.45	20.0	8.4	-17.40	759	43.7*	47.5	-148.57	1080	136.4*		10 33.6	440.80	20.0	8.5	-17.37	776	43.7*	46.9
12 17.8	439.65	0.	0.	0.	776	40.0*	50.6	-165.73	1146	140.2*		12 29.0	470.00	0.	0.	0.	807	39.4*	50.0
14 13.2	468.85	-20.0	-8.5	17.16	837	43.7*	-49.8	-167.99	1232	136.4*		14 24.4	499.20	-20.0	-8.7	17.32	892	43.7*	-50.3
16 8.6	498.05	-35.0	-13.3	28.69	879	49.4*	-54.7	-156.81	1342	130.7*		16 19.8	528.40	-35.0	-13.4	28.59	936	49.4*	-55.1
18 3.9	527.25	-45.0	-16.0	35.99	904	54.0*	-57.9	-129.55	1487	126.1*		18 15.2	557.60	-45.0	-16.2	35.90	960	54.0*	-57.3
20 59.4	556.45	-40.0	-20.0	45.58	933	60.6*	-50.6	-120.04	1656	119.4*		20 10.6	586.80	-40.0	-19.3	45.47	984	60.6*	-58.9
22 54.8	585.65	-35.0	-24.2	50.75	971	72.2*	-40.0	-104.04	1836	107.8*		22 5.9	616.00	-35.0	-23.6	60.62	1015	72.2*	-39.6
		-47.5	-28.6	82.78	1019	90.0*	-28.6	-82.82	2049	90.0*		23 6.4	645.20	-35.0	-29.1	82.65	1051	90.0*	-29.1